US Army Corps of Engineers ®
Omaha District

News Release

March 5, 2010

Contact: Paul Johnston
(402) 995-2416
Paul.t.johnston@usace.army.mil

Corps releases safety ratings for two projects in North Dakota.

Two North Dakota projects recently evaluated by the Army Corps of Engineers require more detailed investigations to assess risks. The Corps will take actions to confirm the conditions of these structures and ensure there is no immediate danger to people and property.

The Williston Protective Works Project and Fort Yates Protective Works Project are owned and operated by the Corps. Both are embankments constructed in low areas to store water impounded by primary dams on the Missouri River.

The Williston project was constructed to provide protection to low lying portions of the city of Williston against backwater from the Garrison reservoir. The Fort Yates project provides protection for the Standing Rock Indian Agency and Fort Yates town site during periods of very high water levels in the Oahe reservoir.

Interim risk reduction measure plans must be developed for all Corps dams that pose unacceptable risks while long-term solutions are pursued. The Corps has evaluated its entire inventory of 630 dams to help set priorities for funding, investigations, and remedial work on a national basis.

The Fort Yates project received a moderate to high risk rating due to the potential for an extreme precipitation event filling the Oahe reservoir to near maximum design levels and overtopping the embankment surrounding Fort Yates. The likelihood of such a weather event occurring is extremely low. This situation presents no immediate danger to people and property.

There would be significant warning time to allow for evacuations if the reservoir were to rise above the elevation of the embankment. Seepage was also identified as a potential issue because the reservoir has never been high enough to test the embankment.

The Williston project received a moderate to high risk rating due to uncertainties associated with the adequacy of the level of protection and the reliability of its seepage control system under extreme flood events. The level of protection has been complicated by changing riverbed conditions and the potential for prolonged high water stages that could make the system vulnerable to wave overtopping.

There is also an extensive relief well system to control under seepage that has become less efficient due to age and the effects of several landside floods resulting from excessive interior drainage.

The Williston project successfully performed on several occasions, most recently in 1997 when the Garrison reservoir rose to within 4 feet of its maximum design elevation. Although seepage was effectively controlled, several underperforming relief wells have been replaced. A new pumping plant is now under construction that will more than double the pumping capacity and help alleviate interior flooding concerns. The plant is scheduled for completion by fall 2010.

The Corps will implement interim risk reduction measures at both projects. These measures will include updating Emergency Action Plans and conducting training exercises with emergency management agencies. Additionally, thorough inspections of the existing relief well system at Williston will be performed in order to identify any additional wells that might need immediate replacement.

These interim measures are intended to reduce the likelihood that problems will occur, while long-term remedial measures are studied. These studies will consist of performing hydrologic and seepage analyses to determine the level of risk the projects present and determine if remediation work is warranted.

The Army Corps of Engineers' primary objective is public safety. It has a comprehensive dam safety monitoring program in place at all of its dams. Corps personnel routinely inspect their dams and evaluate instrumentation data throughout the year. More comprehensive Periodic Inspections are performed every five years. The Corps will continue to coordinate with state dam safety agencies on all aspects of our dam safety program.

# # #